Mr. Samuel H. Scudder, of Cambridge, Mass. Rev. William Rudder, D.D., of Philadelphia. Dr. Morris Lougstreth, of Philadelphia.

Prof. Houston gave notice of his intention to move at the next meeting of the Society, certain corrections in the last page of the printed proceedings (p. 728), being the records of the meeting held June 21, 1878.

And the meeting was adjourned.

## Stated Meeting, October 4, 1878.

Present, 13 members.

Vice-President, Mr. Fraley, in the Chair.

Letters accepting membership were received from the Rev. W. Rudder, D.D., dated Media, October 1; the Hon. Secretary of the Interior, Carl Schurz, dated Department of the Interior, Washington, October 2; the Rev. F. A. Muhlenberg, D.D., dated 4307 Walnut street, Philadelphia, October 2; Mr. J. A. Allen, dated Museum of Comparative Zoology, Cambridge, Mass. October 2; Dr. Elliott Coues, of the U. S. Geological and Geographical Surveys of the Territories, dated Washington, October 2; and Prof. James C. Watson, of the Observatory of the University of Michigan, dated Ann Arbor, September 18, 1878.

Photographs for the album were received from Mr. A. R. Wallace, dated Waldron Edge, Duppas Hill, Croydon, England, and from William H. Flower, F.R.S., of the College of Surgeons, London.

A letter was received from Mr. A. M. Fox, dated Penjerrich, Falmouth, September 4, 1878, respecting the decease of his father, Mr. R. W. Fox (July 25, 1877, aged 88), and the disposition of publications forwarded to him.

Letters of acknowledgment for publications of the Society

received, were read, as follows: Royal Society of Tasmania, February 17 (95, 96); Physical Society of Berlin, June 16 (96, 98, 99); Natural History Society of Göttingen, June 15 (99, XV i, ii); Holland Society of Harlem, June 25 (100; List); Teyler Foundation of Harlem, July 6 (100; List); Royal Society of Luxembourg (100; List): Royal Institution, London, June 1 (III to XI; XVI, ii; 100); Society of Antiquaries, London, June 18 (100; List); Statistical Society, London, July 15 (100; List); Royal Observatory, Greenwich, July 19 (99, 100); Royal Society of Edinburgh, July 5 (100); Maine Historical Society, —— (101); New Hampshire Historical Society, July 8 (101); Massachusetts Historical Society, July 9 (101; Cat. iii); Boston Public Library (101); Harvard College, July 9 (Cat. part iii); New York Hospital, July 8 (101); New York Historical Society, June 10 (101); Albany State Library, July 12 (Cat. part iii); U. S. Military Academy Library, July 16 (101); New Jersey Historical Society, July 8 (101; Cat. iii); Pennsylvania Historical Society, July 8 (101; Cat. iii); Franklin Institute, July 26 (Cat. iii); Mr. John Fulton, Johnstown, July 8 (101); Peabody Institute of Baltimore, July 31 (Cat. iii); Naval Observatory, Washington, July 8 (101); Dr. William Elder, Washington, July 22 (101); Georgia Historical Society, July 9 (101); Rantoul Literary Society, July 8 (101); Chicago Academy of Sciences, July 8 (101); Sig. Mariano Barcena, Mexico, July 8 (100).

Letters acknowledging the receipt of diplomas were received from the following members: Dr. D. G. Gilman, dated Amherst, July 10, 1878; Mr. Lorin Blodget, Philadelphia, July 8, 1878; Mr. Coleman Sellers, Philadelphia, July 8, 1878; Mr. George Stuart, Philadelphia, 1528 N. 18th street, July 29; Mr. John Fulton, Johnstown, Pa., July 8; and Dr. William Elder, Washington, D.C., July 22.

Letters announcing the transmission of publications to this Society were received from the Hungarian Academy of Sciences, Pest, July 16; the Natural History Society at Riga, January, 1878; Zoologico-Botanical Society at Vienna, April 29, 1878; Physical Society at Berlin, June 15, 1878; Holland Society of Sciences at Harlem, July, 1878; Royal Academy of Lisbon, February 7, 1878; Meteorological Office at London, July, 1878; Secretary of State of New Hampshire, August 10, 1878; Harvard College Observatory, Cambridge, August 17, 1878; Second Geological Survey of Pennsylvania, September 5, 1878; Coast Survey Office at Washington, August 17, 1878; Office of the Chief of Engineers, Washington, September 3, 1878; Department of the Interior, Washington, July 24, 1878; \* Department of State at Washington, August 31, 1878; the Argentine National Observatory, April, 1878; and from the Argentine Scientific Society, Buenos Ayres.

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Donations for the Library were received from the Mining Surveyors and Registrars of Victoria; Royal Academies at Berlin and at Brussels; Natural History Societies at Riga, Offenbach am M., Bremen and Boston; Anthropological Society, and Geological Institute at Vienna; Physical Society at Berlin; Holland Society at Harlem; Geographical Society and Revue Politique at Paris; Geographical Commercial Society at Bordeaux; Royal Geographical, Geological, Antiquarian, Zoological and Metereological Societies of London; Meteorological Office of the Royal Society; Prof. Richard Owen, and London Nature; Joseph Gurney Barclay, Esq. Peyton, Essex, Eng.; Geological Survey of New Hampshire; Museum of Comparative Zoology and Peabody Museum in Cambridge, Mass.; American Journal of Science and Art; Mr. Henry T. Eddy, of Princeton, N. J.; Princeton College; Franklin Institute; Journal of Pharmacy, Medical News, Penn Monthly; Second Geological Survey of Pennsylvania; American Journal Mathematics, Baltimore; Mr. Asaph Hall, of Washington; Kansas Agricultural Report, Topeka; Geographical and Statistical Society, Mexico; Ministerio de Fomento, Mexico; and the Argentine Scientific Society in Buenos Ayres.

Also previously, and not noted, from the Royal Danish

<sup>\*</sup> Cartas de Indias from the Government of Spain.

Society; Mr. Albert S. Gatschet; the Editors of the Novara Expedition Reports, Vienna; Meteorological Central Institute of Vienna; Royal Academy at Munich; Dr. Carl Alfred Littel; Natural History Society at Stuttgard; Physical Œcon. Society at Königsberg; Prag Observatory; Annales des Mines; Nouvelle Société Indo-Chinoise at Paris; Dr. Le Grand; M. Joachim Barrande; M. A. Woeikof; Accademia dei Lencei, Rome; Sig. Allesandro Dorno; Turin Observatory; Revista Euskara at Pamplona; R. Academy, Lisbon; R. Academy, Madrid; Victoria Institute, Astronomical Society and Sir Edward Sabine, London; Natural History Society at Newcastle-upon-Tyne; Mauritius Expedition; Asiatic Society of Japan; Tasmanian Society; New Zealand Institute; Royal Cornwall Polytechnic Society; Geological Survey of Canada; Mr. Samuel H. Scudder; Connecticut Academy of Arts and Sciences; Harvard College Observatory; Editors of Psyche; Essex Institute; American Academy of Arts and Sciences, Boston; Mr. W. Ripley Nichols; American Oriental Society; Superintendent of Fairmount Park; Academy of Natural Sciences, Philadelphia; American Journal of the Medical Sciences; Peabody Institute, Baltimore; Official Army Register: Mr. Samuel Newcomb; U. S. Geological and Geographical Survey Bureau; Cincinnati Society of Natural History; and M. Barcena, of Mexico.

A letter was received from the Secretary of the R. Academia di Scienze, Littere ed Arti of Modena, dated July 30, requesting exchanges. On motion the name of this society was ordered to be placed on the list of correspondents to receive the publications.\*

A letter was received from Mr. C. E. Billin, Secretary of the Engineers' Club of Philadelphia, requesting to receive the Society's publications. On motion the request was

NOTE.—Jan. 5, 1877, we received from the "Societa Italiana (in 1782) della Scienze fondata da Anton-Mario Lorgna," Memoirs (4°) 2d Ser. I (1862), II (1866)—3d Series I, i (1867), ii (1868), II (1869-1876). Publiched in Floronco.

granted and the Engineers' Club placed among the Society's correspondents to receive the Proceedings from the beginning of 1878 onward.

Letters requesting the supply of deficiencies in the series of the Society's publications were received from Trübner & Co., from the Boston Public Library, and the Naval Observatory, and were referred to the Librarian for action.

A request for subscription to the "American Catalogue," dated September 17, New York, 37 Park Row, was referred to the Librarian to consider and report.\*

A letter was received from S. Guerrier, Emporia, Kansas, September 9, asking the worth of an old Bible (1602) described by its owner.

The committee to which was referred Prof. Haldeman's plates and descriptions of prehistoric remains in the cave near Chicques rock in Lancaster Co., Pennsylvania, reported in favor of their publication in the Transactions of the Society. On motion the report was accepted and the committee discharged. On motion the publication was ordered.

The Committee on Finance was requested to inquire into and report upon the expediency of publishing the two memoirs presented at recent meetings by Dr. Lautenbach, of Geneva, Switzerland.\*

Dr. König exhibited and described a piece of chemical apparatus which he invented for the purpose of applying the use of sliding glass wedges, colored and transparent, and empirically graduated, to the optical extinction of the colors, simple or compound, of the blowpipe beads of the chromatic metals, ground to a given thickness and rendered transparent by a coating of balsam. The use of the glass wedge has been known; but this use of complimentary colors for producing the extinction of a given color, and for thus obtaining the exact degree on a scale marking the percentage of metallic elements contained in the bead, is new, and, as

<sup>\*</sup> See Minute Book, Oct. 18, 1878.

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Dr. König promised to show in a coming memoir, efficient for very precise determinations.

Prof. Houston desired to place on record an extension of the researches of Prof. Thompson and himself, on Electric Lighting, obtained by passing the Ruhmkorff discharge through glass tubes containing silica, carbonate of ammonia and similar substances.

Prof. P. E. Chase (detained from the meeting by illness) presented, through the Secretary, a communication entitled "Crucial Harmonies."

Mr. Lesley exhibited several plates of the Permean fossil plants discovered and described by Profs. Fontaine and White of the West Virginia University, at Morgantown, in the country west of the Monongahela River, and took occasion to speak of the progress made by Prof. James Hall, Dr. T. Sterry Hunt and others at the late Congress of Geologists opened on the 29th of August last at Paris, in harmonizing the geologies of Europe and America. He described the meetings of the Congress, and the appointment of national committees on classification and coloration, to report to Prof. Capellini six months previous to the next assembling of the International Congress of Geologists at Bologna in 1881.

Mr. Lesley laid on the table for examination some quasi coprolites, found by Mr. W. D. H. Mason in the roof slates of the Mammoth bed, as described in a letter dated Williamstown, July 29, 1878.

Pending nominations 864 to 870 were read.

Prof. Houston moved that the minutes on printed page 728 of No. 101 of the Proceedings be corrected. Owing to the lateness of the hour, and at the request of the Secretary, who reported the minutes, the subject was postponed for consideration at the next meeting.

And the meeting was adjourned.